

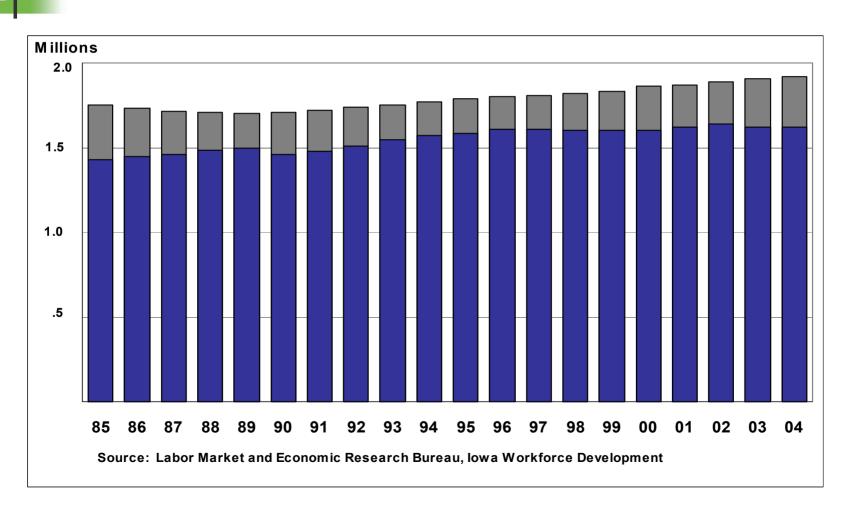
Workforce Trends and the Implications on the Workforce

Iowa Workforce Development October 2005

4 Basic Trends

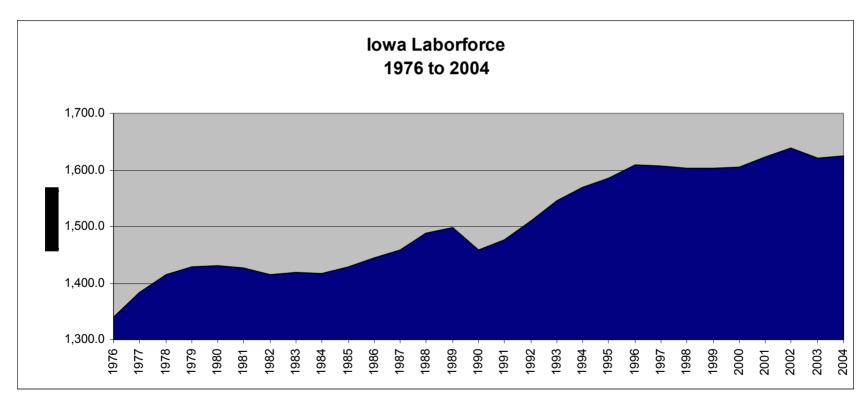
- Demographics
 - Population will grow 1% by 2030
 - Labor market will grow at a slower rate
 - Baby boomers are retiring
 - Brain Drain
- Globalization
- Technology
 - Rely on brain power rather than machinery or processes to drive production
- Changing Values and Attitudes
 - Looking for SWANS
 - Soft Skills





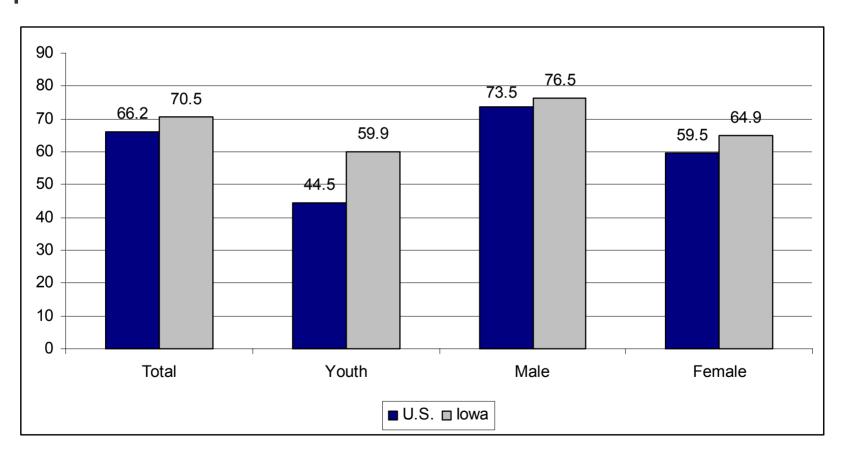


Iowa Labor Force



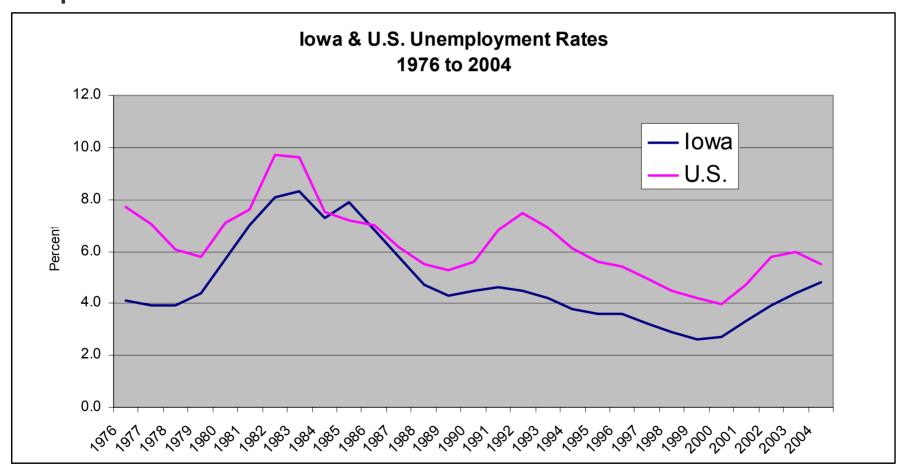


Labor Force Participation Rates-2003



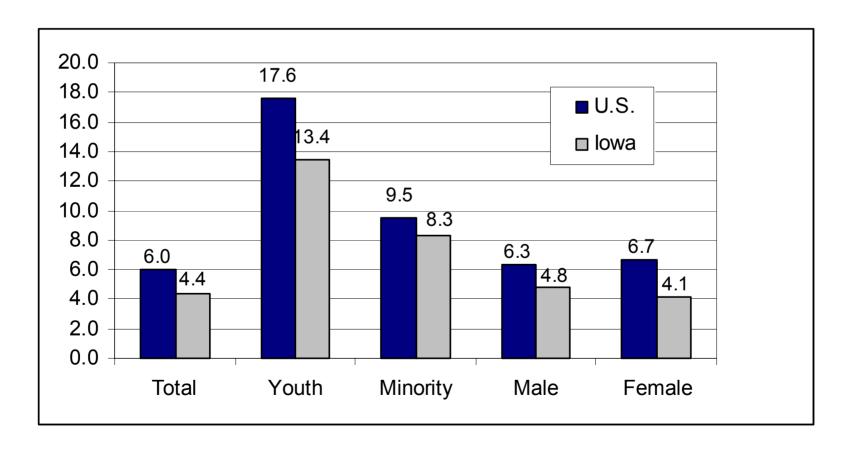


Unemployment Rates





Unemployment Rates - 2003

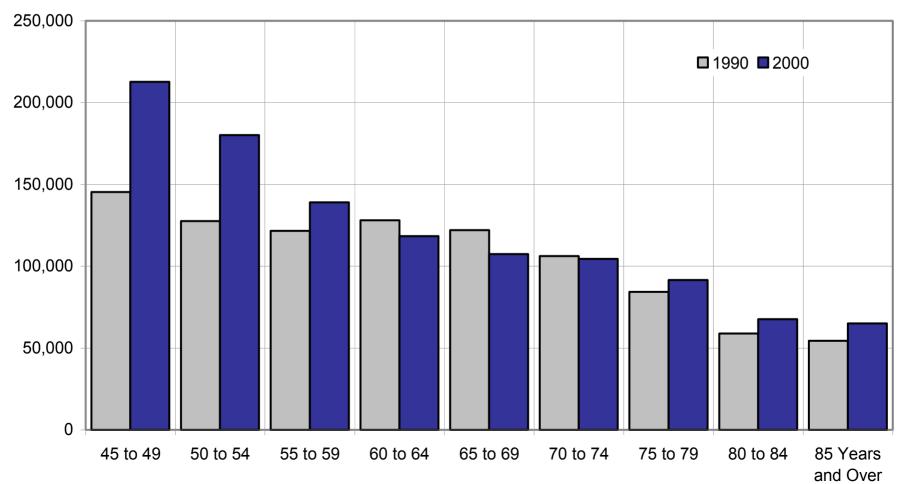


Baby-boomers

- The baby boomer generation represents the largest portion of the labor force
 - U.S. employers and government planners are concerned that a labor shortage could occur between 2015 and 2025
 - This is intensified by the number of workers 20-35 is significantly smaller
- In Iowa the labor shortage may not be as critical as older workers are living longer and thus working longer
 - This is partly due to the strains on the health care system and Social Security will start running a deficit



Baby-boomers Reached Middle Age Between 1990 and 2000





Industries That Will Be Most Affected By Baby-boomers

- Manufacturing
- Public Administration
- Educational Services
- Transportation
- Health Services
- Construction

Occupations That Will Be Most Affected By Baby-boomers

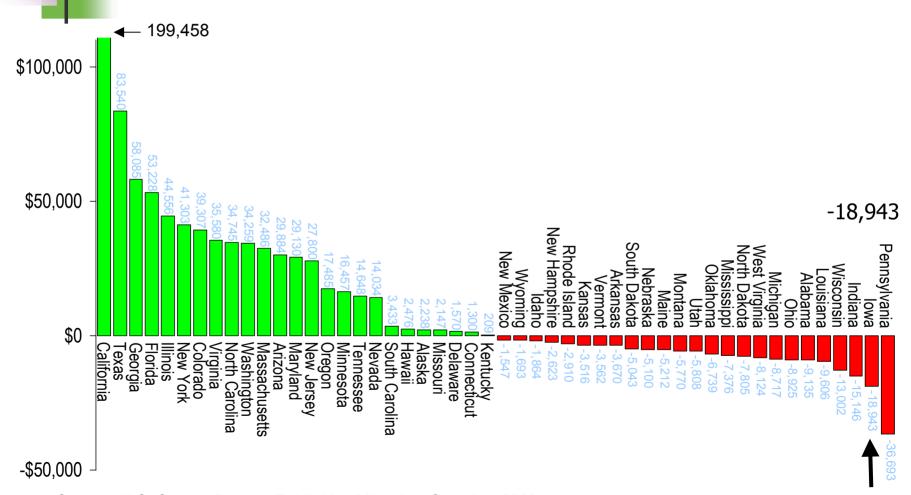
- Airline Pilots & Navigators
- Management Analysts
- Special Education Teachers
- Photographers
- Teachers Aides
- Industrial Engineers
- Eligibility Clerks, social welfare
- Personnel & Labor Relations Managers
- Postal Clerks

- Police & Detectives Supervisors
- Plumbers, Pipefitters & Steamfitters
- Financial Mangers
- Psychologists
- Social Workers
- Lawyers
- Education Administrators
- Elementary School Teachers
- Registered Nurses

Baby-boomers are Retiring

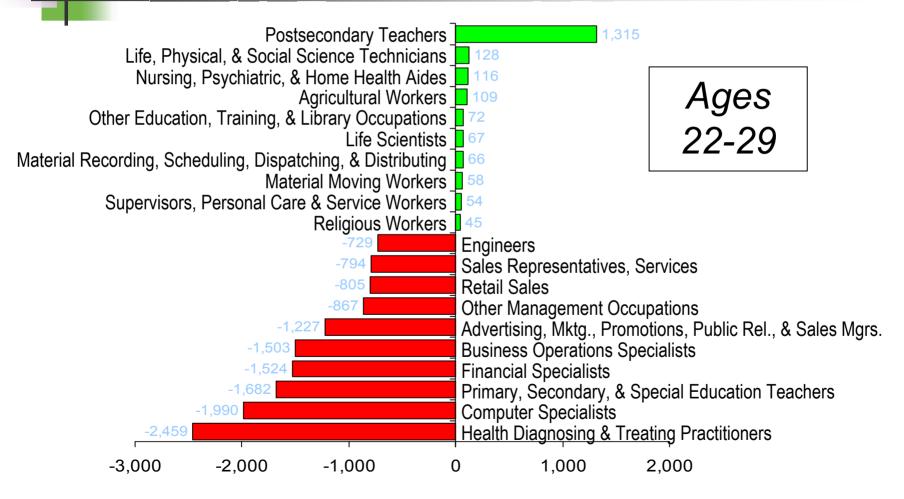
- Based on estimates from OMB, it is estimated that 70% of all baby boomers expect to be earning a paycheck past retirement since the Treasury will need to increase their borrowing to pay for Medicare and Medicaid.
- Temporary, seasonal and part-time work will increase
- Companies may use phased-retirement plans

Brain Drain: Net Migration of Residents Age 22-29 with a College Degree (Associate or Higher), 1995-2000



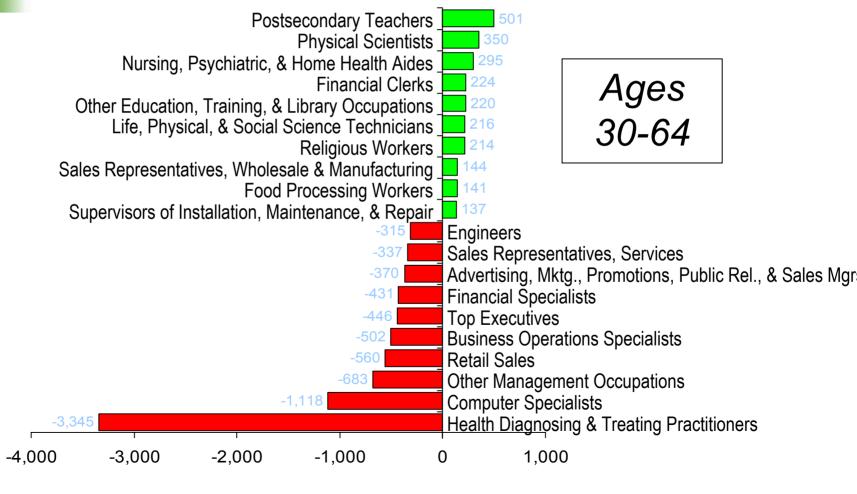
Source: U.S. Census Bureau, Public Use Microdate Samples, 2000

Brain Drain: Net Migration of Residents with College Degrees—Iowa, 1995-2000



Source: U.S. Census Bureau's Public Use Microdata Samples (Based on 2000 Census)

Brain Drain: Net Migration of Residents with College Degrees—Iowa, 1995-2000



Source: U.S. Census Bureau's Public Use Microdata Samples (Based on 2000 Census)



- The administrative and support services industry will generate the largest number of jobs +21,445 between 2002 and 2012
- Iowa is expected to generate more than 60,600 job openings annually between 2002 and 2012
- 36% of the job openings will be new jobs, the rest will be replacement jobs due to retirements, turnover
- Education, Health Care, Professional Scientific & Technical Services and the Finance industry will create the most openings



	2002	2012	
	Estimated	Projected	Total
Industry Title	Employment	Employment	Growth
Administrative and Support Services	57,715	79,160	21,445
Educational Services	154,970	170,210	15,240
Nursing and Residential Care Facilities	50,660	64,640	13,980
Ambulatory Health Care Services	42,080	54,700	12,620
Total Self-Employed and Unpaid Family Workers, All Jobs	135,755	146,195	10,440
Professional, Scientific, and Technical Services	37,500	46,875	9,375
Food Services and Drinking Places	88,695	97,305	8,610
Insurance Carriers and Related Activities	39,615	47,750	8,135
Social Assistance	21,205	29,260	8,055
Specialty Trade Contractors	39,475	47,445	7,970
Truck Transportation	26,650	34,120	7,470
Hospitals	60,145	65,940	5,795
Wood Product Manufacturing	11,730	17,200	5,470
Internet Service Providers, Web Search Portals, and Data Processing Services	8,335	12,835	4,500
Credit Intermediation and Related Activities	36,135	40,520	4,385
Transportation Equipment Manufacturing	18,650	22,780	4,130
Motor Vehicle and Parts Dealers	22,535	26,610	4,075
General Merchandise Stores	33,380	37,080	3,700
Warehousing and Storage	7,570	10,835	3,265
Merchant Wholesalers, Durable Goods	29,085	32,295	3,210
Amusement, Gambling, and Recreation Industries	16,055	19,265	3,210
Management of Companies and Enterprises	7,595	10,730	3,135
Food and Beverage Stores	37,135	40,245	3,110
Religious, Grantmaking, Civic, Professional, and Similar Organizations	31,265	34,255	2,990
Building Material and Garden Equipment and Supplies Dealers	16,510	19,475	2,965

Iowa Fastest Growing Occupations

	2002	2012	Annual
	Estimated	Projected	Growth
Occupation Title	Employment	Employment	Rate(%)
Medical Assistants	2,115	3,120	4.8
Network Systems and Data Communications Analysts	1,465	2,090	4.3
Medical Records and Health Information Technicians	1,880	2,635	4.0
Database Administrators	670	935	4.0
Computer Software Engineers, Applications	2,240	3,115	3.9
Physician Assistants	705	980	3.9
Home Health Aides	6,940	9,580	3.8
Set and Exhibit Designers	240	330	3.8
Social and Human Service Assistants	5,950	8,175	3.7
Physical Therapist Assistants	620	850	3.7
Computer Systems Analysts	5,135	6,955	3.5
Personal and Home Care Aides	6,360	8,595	3.5
Philosophy and Religion Teachers, Postsecondary	305	410	3.4
Mental Health and Substance Abuse Social Workers	645	865	3.4
Self-Enrichment Education Teachers	2,160	2,895	3.4
Physical Therapist Aides	445	595	3.4
Sales Managers	2,985	3,970	3.3
Residential Advisors	700	930	3.3
Computer and Information Systems Managers	2,380	3,155	3.3
Computer Software Engineers, Systems Software	2,120	2,810	3.3
Survey Researchers	190	250	3.2
Dental Hygienists	1,695	2,230	3.2
Training and Development Specialists	2,230	2,930	3.1
Dental Assistants	2,330	3,060	3.1
Respiratory Therapy Technicians	275	360	3.1
Art, Drama, and Music Teachers, Postsecondary	910	1,190	3.1
Customer Service Representatives	26,225	34,265	3.1
Security Guards	5,920	7,730	3.1
Foreign Language and Literature Teachers, Postsecondary	295	385	3.1

Source: Labor Market & Economic Research Bureau, Iowa Workforce Development

Health Care Strain/Opportunities

- Increase in the aging boomers will cause strain and opportunities in the health care system
- Employment levels for 2012 are projected to grow for Registered Nurses by 23%
- Average annual openings for Registered Nurses is 1200
- Estimated that 1 million new RN's must be recruited over the next five years
 - Higher pay & hiring bonuses have increased
 - Offering of licensing exams overseas
- Due to the increase costs of Health Care, some of the support services are being offshored (medical records, specialist who read medical tests, etc.)

Globalization

3 Factors have led to the rise in offshoring

- The educational systems of less-developed countries have improved dramatically
- Investment capital to both China and India is on the move in support of existing or new businesses
- Corporations are facing pricing pressures due to an increasingly competitive global marketplace

Outsourcing/Offshoring

Technical advances now allow for remote capabilities for almost any type of business process

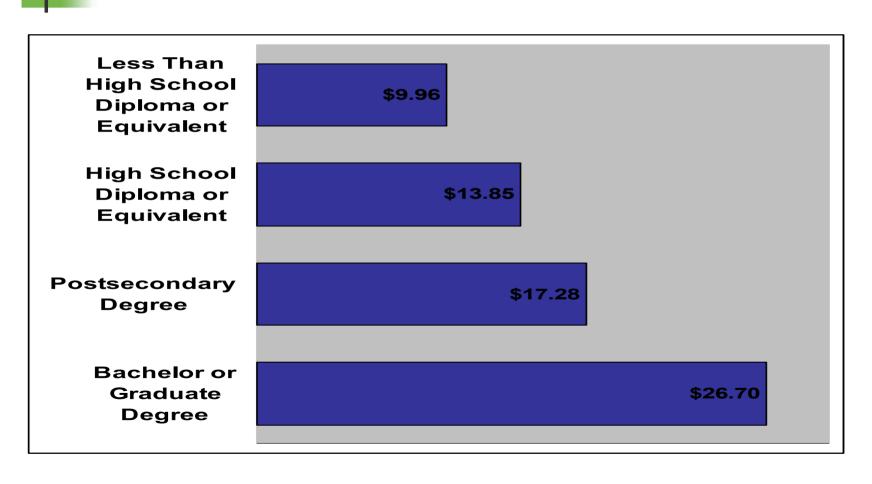
- Call Centers
- Medical services & Health care specialist
- Entry level programming
- Accounting functions
- Legal services

IT Revolution 2

- Greater demand for high-skilled workers than for lowskilled workers
- Careers in highest demand will be managerial, technical and professional – all requiring higher education
- Advances in technology will continue to accelerate and transform the way we work
- Increased globalization will mean that more companies are taking work off site and off shore

Higher Education Means Greater Earning Potential

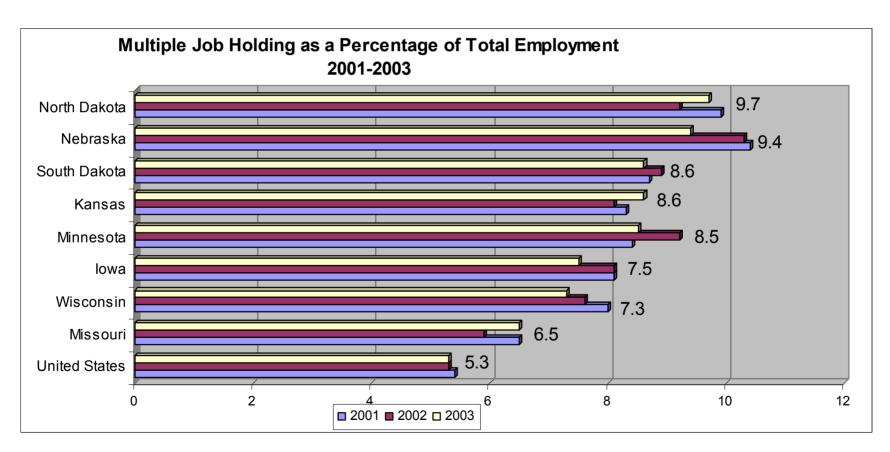
2004 Mean Hourly Wages by Education Levels



Declining Occupations 2002-2012

	2002	2012	Annual
	Estimated	Projected	Growth
Occupation Title	Employment	Employment	Rate (%)
Word Processors and Typists	2,250	1,740	-2.3
Electrical and Electronic Equipment Assemblers	2,755	2,305	-1.6
Loan Interviewers and Clerks	1,260	1,100	-1.3
Computer Operators	2,510	2,195	-1.3
Postal Service Mail Sorters, Processors, and Processing Machine Operators	3,050	2,670	-1.2
Travel Agents	620	545	-1.2
Farmers and Ranchers	90,055	79,710	-1.1
Meter Readers, Utilities	765	680	-1.1
Order Clerks	2,530	2,285	-1.0
Coil Winders, Tapers, and Finishers	375	340	-0.9
Prepress Technicians and Workers	1,230	1,125	-0.9
Locomotive Engineers	850	780	-0.8
Announcers	1,295	1,200	-0.7
Procurement Clerks	615	575	-0.7
Credit Authorizers, Checkers, and Clerks	985	925	-0.6
Electrical Power-Line Installers and Repairers	1,400	1,320	-0.6
Bindery Workers	1,160	1,100	-0.5
Railroad Conductors and Yardmasters	685	650	-0.5
Secretaries, Except Legal, Medical, and Executive	22,775	21,830	-0.4
Switchboard Operators, Including Answering Service	1,575	1,510	-0.4
Power Plant Operators	485	465	-0.4
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	520	500	-0.4
Cooks, Institution and Cafeteria	8,380	8,070	-0.4
Dental Laboratory Technicians	420	405	-0.4

Multiple Job Holding



Source: Bureau of Labor Statistics

Changing Values and Attitudes

Employers are constantly complaining about the lack of soft skills and are currently trying to find ways to measure and screen future employees based on soft skills

SWANS are people who are Smart, Work hard, are Ambitious, and Nice

- Dependable
- Likeable
- Workability

Employers Expectations

Basic skills

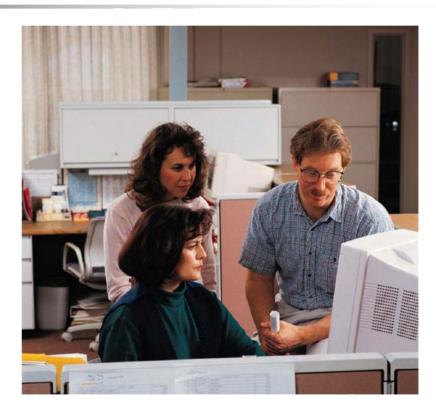
- Reading
- Writing
- Math
- Listening
- Speaking



Employers Expectations

Thinking skills

- Creativity
- Decision making
- Problem solving
- Visualizing
- Learning
- Reasoning
- Technology



Employers Expectations

Personal qualities

- Responsibility
- Self-esteem
- Social
- Self-management
- Honesty



Skills

- Hard Skills
 - Technical
 - Knowledge based
- Soft Skills
 - Work ethic
 - Communication skills
 - Ethics honesty
 - Responsibility
 - Ability to get along with others

Challenges Up Ahead

- Skills Shortage
 - Technical
 - Attitude (soft skills)
- Exporting of White-Collar Work
- Strained Retirement and Health-Care Systems



- The nonstop, technology-driven, global economy is tearing down traditional concepts of time and space.
- The majority of employees hired by manufacturers will be college graduates or will have job-specific, post-high school training.
- Wave of retiree entrepreneurs will set up their own businesses.



- Companies will focus on leadership transitioning as the older baby boomers start to retire
- More companies will take work off site and off shore.
- Company structures will be flatter with less emphasis on hierarchy, workers will form teams to address issues and manage work
- There will be an increasing interest in measuring applicants' soft skills, such as ethics, energy, motivation and interpersonal skills



So What Does This Mean for Employers in Iowa??

- Employers will be forced to adjust compensation, benefits and work schedules to attract and keep employees
- Employers will value workers who can easily adapt to changing technologies and shifting product demand
- Organizations will become more flexible, networked, flat, diverse and virtual
- Increasing pressure to link pay to performance



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